

## PATENT ABSTRACTS OF JAPAN

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**(54) LIQUID CRYSTAL DISPLAY ELEMENT**

**(57)Abstract:**

**PURPOSE:** To provide a uniform and stable condition of liquid crystal orientation and present a good reproducibility by subjecting the work for a liquid crystal display element to an orientation processing without resorting to the rubbing method.

**CONSTITUTION:** A liquid crystal display element is equipped with a pair of base boards 1, 2 facing with a certain distance apart from each other and liquid crystal 3 encapsulated in the gap between the base boards 1, 2, wherein the surface shapes of these mating surfaces of base boards 1, 2 are concave and convex periodically. On the mating surfaces, plastic film stretched over the convex surface is pressed while complying with the periodic convex/concave form to cause ductile elongation of the plastic film, and at the same time, this is fixed in tight attachment to the convex/concave surfaces. Thereby orientation buffer layers 14, 24 are formed.

